ILLUSTRATING PHRASAL VERBS: A VISUAL TRANSLATION OF COGNITIVE LINGUISTIC RESEARCH FOR THE CLASSROOM

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Abstract

Phrasal verbs are notoriously difficult for non-native English students to learn because of their seemingly non-compositional and non-analytical nature. However, they are ubiquitous in the English language and growing in number, and subsequently necessary for comprehension and fluency. The difficulties with teaching and learning phrasal verbs involve syntactic, semantic, and cultural aspects, which current pedagogical approaches do not adequately address. Cognitive linguistics research suggests the potential for clearer and more efficient ways to teach and learn phrasal verbs using patterns of meaning found in the prepositional and adverbial particles. These patterns rely on understanding fundamental English metaphors and spatial schemas. With the new understanding that phrasal verbs are analyzable through metaphorical extension, researchers have provided suggestions for pedagogical approaches. However, there continues to be a gap between research and practical application in the classroom. Moreover, there is an assumption by researchers that phrasal verbs are not accessible to beginners because of lack of lexis and the need to analyze patterns. Drawing from conceptual-metaphor theory, image-schema theory, and other cognitive-linguistic approaches to teaching language, three open educational resource lesson plans posted on the website "Illustrating English" provide visual adaptations of research-inspired pedagogical material in the hopes that this will provide a bridge between short-term teaching for research, and long-term teaching of less experienced students in the classroom.

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Chapter 1

As a young student living abroad, I vividly remember a French student telling me that the most confusing part of the English language was prepositions. This confused me. Why would prepositions be so difficult? Don't they simply imply direction? What could be confusing about up, down, in, and out? His comment made such a lasting impression on me that I decided to dig up more information about prepositions during my English Grammar class. I quickly discovered the concept of multi-word verbs, often encompassed in the umbrella term "phrasal verb," and began to understand why prepositions, or the combination of prepositions with verbs, can be so confusing for non-native speakers.

Strangely enough, as a native speaker of English, I had never before encountered the concept of a "phrasal verb." And yet, phrasal verbs are both extremely common, and "highly productive" (Gardner & Davies, 2007), meaning that new meanings of common phrasal verbs, as well as new unique combinations of verb plus particle, are created every year. The only grammar lesson from my past that touched on phrasal verbs remotely was this prescriptive and often unheeded rule: "Never end a sentence with a preposition,"- a rule supposedly mocked by Winston Churchill with a famous (if bogus) quote, "This is the type of errant pedantry up with which I will not put" (Owen, 2020). The truth is, writing and speaking can be made to sound much more natural and fluid when phrasal verbs are used effectively, even in academic and formal language registers (Blake, 2003). The more I studied, the more I realized that phrasal verbs are an integral, some would say crucial (Garnier & Schmitt, 2015), part of the English

language, particularly when used in casual conversation. Without them, non-native speakers can sound stilted and formal, marginalizing them from social society (Ushigusa, 2008).

Despite the importance of phrasal verbs, there is no obvious teaching approach that adequately addressed the peculiar idiomatic and polysemic nature of these verbs. Some teachers choose to teach phrasal verbs according to the verb (*come* up, *come* out, *come* in). This however opens up several problematic issues. Which verbs should teachers begin with, when there are over 5,000 phrasal verbs used in the English language (McCarthy & O'Dell, 2004)? Is there any way of knowing which verbs are the most useful and important out of those 5,000 plus? And is grouping phrasal verbs according the verb really helpful in comprehending meaning when so many phrasal verbs are idiomatic? For example, does an understanding of "come over" (visit) help an ELL understand the meaning of "come out with it" (let out a secret)?

Other teachers organize phrasal verbs according to a theme, such as dating (make out), daily routine (wake up), or specific purposes such as Medical English (an epidemic broke out). This helps with memorization around a theme, and with the collocations so prevalent with phrasal verbs, but not with polysemy. If a student learns that "make out" means "to kiss amorously," what will they think of the sentence "I can just make out the lighthouse in the distance?"

A new conceptual approach aims to teach phrasal verbs according to the particle, rather than according to verb (Thom, 2017; White, 2012). Research shows that the prepositional or adverbial particle attached to the phrasal verb contains a directional metaphor that might be systematically and explicitly taught to students, allowing them to use the metaphor to guess the meaning of novel phrasal verbs (Rudzka-Ostyn, 2008) However, research on using such cognitive-based approaches to teach phrasal verbs is so new that it has not yet been developed

into widespread visual and pedagogical models. There are *some* pedagogical models; they are just not widespread and are often inaccessible to all but the advanced student of English.

One of these models is Rudska-Ostyn's 2008 book titled "Word Power: Phrasal Verbs and Compounds." Included in this book are basic black and white visual schemas meant to help visualize the way English speakers perceive the world in terms of "landmarks" and "trajectors:" the object in place in relation to the object in motion. The book has been cited by 233 scholarly publications but is difficult for regular teachers to access. It is my hope to take this book and other scholarly publications on cognitive-based approaches and translate them into lesson plans designed for less advanced students and children. I plan to make these lesson plans available to teachers via an internet website titled "Illustrating English."

In order not to overwhelm myself with material, I plan to focus on three phrasal verb particles: the particles *on*, *up*, and *out*. I chose these because the two most common phrasal verbs, according to the PHaVE dictionary, are the verbs "Go on," and "Pick up (phave-dictionary.englishup.me), and *out* is well represented in the literature. I would like to address the website to English language teachers (ELT) with a focus on making phrasal verbs accessible and visible to less advanced students. Lesson plans will be based on scholarly research around phrasal verbs such as the metaphorical meanings of particles, representations of image-schemas, and semantic networks. However, they will also draw on other teaching methods to make learning visible (Hattie, 2008), such as anchor charts and illustrations, visual mind maps of particles, or illustrating the differences and similarities between plain and phrasal verb pairs. It is my hope that I will be able to create a valuable web resource for teachers designed make phrasal verbs visible both for teachers and their students.

Chapter 2: Literature Review

Introduction

The concept of a phrasal verb was first used in print in 1925 in the book *Words and Idioms*, although the concept was verbalized as early as the 18th century (Oxford University Press, 2020). Samuel Johnson, father of the first American dictionary, wrote in his preface:

There is another kind of composition more frequent in our language than perhaps in any other, from which arises to foreigners the greatest difficulty. We modify the signification of many words by a particle subjoined; as to *come off*, to escape by a fetch; to *fall on*, to attack; to *fall off*, to apostatize; to *break off*, to stop abruptly ... These I have noted with great care (Oxford University Press, 2020, History section, para. 2).

Phrasal verbs continue to present a great difficulty to English Language Learners (ELLs) despite their ubiquity (Side, 1990; Kurtyka, 2006; Gardner & Davies, 2007; Neagu, 2007; Wong, 2018), and there is still general confusion over which phrasal verbs to teach and how to include them in curriculum (Gardner & Davies, 2007). Current textbooks touch on them lightly, if at all, and there is still debate over terminology and structure. This literature review explores the ubiquity and importance of phrasal verbs in the English language, why ELLs and their teachers struggle with them, and new research on improved methods of teaching. Specifically, new findings in cognitive linguistic research will be discussed as a possible model for a new way teaching. Finally, the literature review will address gaps in the research and examine how

modern research on phrasal verbs might be adapted for the classroom, specifically for lower level learners.

Ubiquity and Importance of Phrasal Verbs

Research using modern databases of corpora have revealed both the extent to which phrasal verbs are used in modern English (Thom, 2017), and the steady increase in usage, particularly in the 20th century (Oxford University Press, 2020). There are thousands of phrasal verbs currently in use in the English language (Garnier & Schmitt, 2015) and learners encounter, on average, "one [phrasal verb construction] in every 150 words of English" (Gardner & Davies, 2007, p. 347). Moreover, new phrasal verbs are constantly being created (Neagu, 2007; Requejo & Diaz, 2008).

Although most phrasal verbs have single-word equivalents, there is a register and expressiveness associated with phrasal verbs that cannot be replaced without sounding alien (Side, 1990; Raddaoui, 2004; Requejo & Diaz, 2008; Thyab, 2019). Even highly proficient non-native speakers, if they have not mastered phrasal verbs and other idiomatic phrases, can find themselves marginalized in society (Ushigusa, 2008). Moreover, even though phrasal verbs are associated with informal speech, there is evidence that such formulaic sequences are an indicator of competency even in academic settings (Raddaoui, 2004; Wood, 2009; Jacobsen, 2013; Alangari, 2020). Phrasal verbs allow for lexical richness by using metaphoric language (Gardner & Davies, 2007) and for lexical economy, allowing fluent speakers to say exactly what they mean in as few words as possible. This fulfills Paul Grice's conversational maxim of quantity and reduces processing and retrieval time for speaker and listener (Raddaoui, 2004; Neagu, 2007; Paulmann et al, 2015).

Difficulties in Teaching and Learning Phrasal Verbs

Despite their ubiquity, phrasal verbs are notoriously difficult for ELLs to learn (Side, 1990; Kurtyka, 2006; Neagu, 2007). Aside from the sheer number of phrasal verbs, learners are faced with syntactic, semantic, and cultural difficulties. These difficulties result in the active avoidance of phrasal verbs (Dagut & Laufer, 1985; Jahedi & Mukundan, 2015). Even those who speak other Germanic languages, which use phrasal verbs, tend to avoid these idiomatic expressions in English. ELLs tend to use a single-word synonym instead to avoid confusion (Hulstijn & Marchena, 1989, as cited in Jahedi & Mukundan, 2015; Side, 1990; White, 2012). Some examples of syntactic, semantic, and cultural confusion can be seen in Table 2.1.

	Phrasal Verb	Explanation of Confusion
Syntactic	* ¹ After a long argument, the two friends finally <i>made</i> it <i>up</i> .	To make up (intransitive) = to resolve an argument To make up something (transitive) = to invent
Semantic	She <i>ended up</i> in Seattle.	The meaning of <i>ended up</i> cannot be inferred from <i>end</i> and <i>up</i>
Cultural	Put up your feet and put up your hands	Using different collocations (feet or hands) changes connotations that are easily misunderstood from a cultural perspective.

Table 2.1: Sources of Confusion for ELLs

A lack of consensus over how to define and operationalize phrasal verbs has increased confusion on the part of teachers and students. Phrasal verbs have been called both multi-word verbs, verb-particle constructions, and phrasal, prepositional and phrasal-prepositional verbs (Alangari, 2020; Cambridge Dictionary, 2020). Some grammarians prefer to refer to literal (or transparent) verb-particle constructions as prepositional verbs and define only idiomatic multi-word verbs as "phrasal." Yet these two constructions are both defined as phrasal verbs by

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¹ The asterix * indicates abnormal usage

English as a Foreign Language (EFL) teachers. Once the verb-particle construction has been defined, the phrasal verb might be organized into three patterns (White, 2012)...or four patterns (studyandexam.com)...or five (RIT) or even six (Kurtyka, 2001), and perhaps more, depending on transitivity, separability. The well-respected Perdue Online Writing Lab (2020) takes no position at all on syntactic patterns, and simply states, "Unfortunately, there is usually no indicator whether an idiomatic phrase is separable, inseparable, or intransitive. In most cases the phrases must simply be memorized." If this is so, then memorization becomes critical, as syntax radically affects the meaning of a phrasal verb. The insertion of an object ("He *blew up*" and "He *blew it up*") might mean the difference between sudden anger, and an exploding bomb.

This radical shift in meaning highlights the polysemous, or multi-meaning nature of phrasal verbs. Each phrasal verb has an average of 5.6 meaning senses per verb, with some over twenty (Gardner & Davies, 2007). Researchers have attempted to lessen the cognitive load on students and teachers by identifying, through corpus research, the most frequent phrasal verbs (Gardner & Davies, 2007; Liu, 2011; Garnier & Schmitt, 2015), However, one-hundred phrasal verbs still translates into 560 distinct meanings, making memorization an almost impossible task.

Memorization also does not help ELLs deal with the changing semantic status and increasing number of phrasal verbs over time (Kurtyka, 2001). According to Martin (1990), phrasal verbs are becoming increasingly more "complex, context-bound, and abstract" (cited in Jahedi & Mukundan, 2015 p. 158). The use of the phrasal verb *come out* to refer to someone admitting homosexuality is one modern example. And in 2020, during the pandemic, the following new phrasal verb could be seen on signs in the United States: "Mask up!" These new verbs are created with relative ease by native speakers who understand phrasal verbs intuitively, leading to rapid semantic change. But it also suggests that there is a cognitive pattern to phrasal

verbs, which is accessible to native speakers, that might be made accessible to ELLs as well (Side, 1990).

For cultural reasons, the cognitive patterns of spatial orientation are intuitive to native speakers, but not naturally available to ELLs. Other languages might use other syntactic and grammatical forms to express spatial orientation (Boers & Demecheleer, 1998; Side, 1990). For example, Polish speakers use prefixes attached to words, instead of particles (Kurtyka, 2006). In Greek, the radio volume is 'opened' or 'closed,' rather than turned 'up' or 'down' (Side, 1990). Metaphorical understandings change between cultures too. In English emotions are described as emerging from the heart, while Malay speakers refer to those same emotions as coming from the liver (Charteris-Black, 2002; Boers, 2003). When phrasal verbs in English conflict with the culture of a different language, then mapping one abstract concept onto another becomes more difficult (Yang and Hsieh, 2010).

Lack of Pedagogical Support

The tendency to struggle with and avoid phrasal verbs may be compounded by the poor presentation of phrasal verbs in textbooks and other materials (Jahedi & Mukundun, 2015). The traditional textbook approach to idioms and phrasal verbs is that there is no conceptual system behind them; they are assumed to be arbitrary, non-compositional (the parts do not add up to the whole), and therefore non-analyzable (Side, 1990; Tyler & Evans, 2004; Neagu, 2007; Ganji, 2011; White, 2012; Thom, 2017; Al-Otaibi, 2019). Without a conceptual, meaningful framework, the meaning of phrasal verbs cannot be predicted, but must be memorized (Lee, 2012; White, 2012). As a result, many textbooks avoid teaching them explicitly, relying instead on the implicit learning of phrasal verbs through context. In a survey of five English textbooks

in Sweden, Jacobsen (2013) noted, "As most of the books did not include sections on phrasal verbs, neither in the main chapters of the book, nor in grammar sections, nor in any other lists or appendices, this section will be rather short" (p. 17).

Among textbooks that teach phrasal verbs, there are several common methods (Table 2.2). Like most vocabulary, phrasal verbs can be grouped together to aid in memorization. One way is to group according to verb, and another is to group into thematic categories.

Grouping by Verb	Grouping by Theme (Routine)
Turn out (transitive, separable)	Wake up
Turn out (instransitive)	Get up
Turn up (transitive, separable)	Put on/throw on
Turn up (intransitive)	Eat up
Turn in (transitive, separable)	Clean up/wash up
Turn in (intransitive)	Head out/head off
Turn over (transitive, separable)	Drop by
Turn over (intransitive)	Pick up

Table 2.2 Common Pedagogical Approaches to Teaching Phrasal Verbs

There are pitfalls to these methods though. First, research on textbook coverage indicates that there are no standardized criteria for choosing which phrasal verbs to teach. The choice of such vocabulary is subjective, meaning that a large portion of the phrasal verbs found in textbooks are likely not representative of everyday speech (Koprowski, 2005, & McAleese, 2013, cited in Jahedi & Mukundan, 2015). Secondly, not all the meaning is held in the root verb. Research suggests that most of the meaning is carried in the particle. For example, when new synonyms are coined, it is the root word that changes, while the particle stays the same (run off vs. jet off; hold on vs. hang on) (Side, 1990). Thirdly, apart from aiding in memorization, the meaning of the verbs may have little in common (Side, 1990). What does *turning in* for the night have in common with *turning off* the light? Or *turning up* the temperature? Fourthly, these approaches do not teach the polysemous nature of these verbs (Garnier & Schmitt, 2015) How is *picking up* connected to *picking up a date* or *picking up a room?* And lastly, they do not provide

a means for students to predict the meaning of the many novel phrasal verbs they will encounter in everyday language (White, 2012).

The Cognitive Approach

Cognitive linguistics, or the study of the way the sub-conscious and semi-conscious mind impacts language, may offer a clearer pedagogical approach. The Cognitive Approach suggests that there is some systematicity inherent in phrasal verbs, stemming from pre-linguistic embodied experiences in the world (Tyler & Evans, 2003; Ganji, 2011; Thom, 2017). From the initial literal experience with the world, a word's core (or prototypical) meaning is developed.

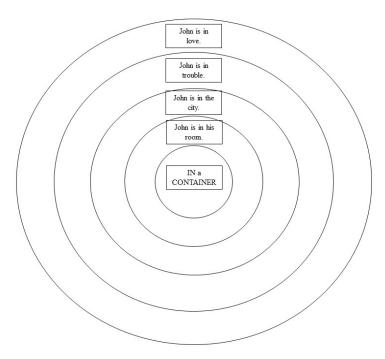


Figure 2.1: Extension of the *container* metaphor

Subsequently, additional meanings are added as metaphorical extensions of the core sense (White, 2012) (See Figure 2.1). Abstract concepts such as love, emotion, time, and knowledge are extended through metaphorical mapping (Lakoff & Johnson, 1980, as cited in Thom, 2017).

For example, from the experience of containers, houses become containers, as do geographical locations, experiences, the mind, and love. One way to conceptualize this metaphorical mapping is through conceptual metaphors, and another is through image schemas.

The conceptual metaphor approach (CMA).

Lakoff and Johnson suggested that metaphor is not just a literary device, but a ubiquitous part of everyday language (1980; Lee, 2016). Understanding these metaphors can be a powerful tool for helping students grasp and retain idiomatic language (Boers 2000 & 2003;

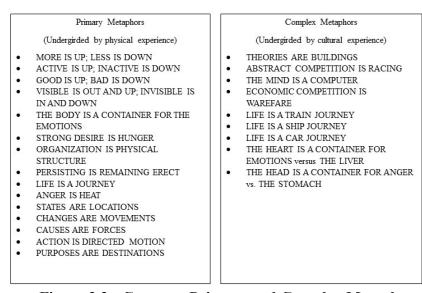


Figure 2.2: Common Primary and Complex Metaphors

Black, 2002, Rundell, 2005a, Ganji, 2011). Conceptual metaphors include primary metaphors related to physical experience, and complex metaphors related to cultural experience (See Figure 2.2).

These conceptual metaphors can provide a conceptual framework for grouping expressions, make teaching more efficient, promote retention as students work to make categorization judgements, and provide a pathway for learners to predict the meaning of novel phrasal verbs (Boers, 2000 & 2003).

Explicit instruction in metaphor awareness.

Because students from different backgrounds bring with them different conceptual metaphors from their own language, they are unlikely to simply absorb new complex metaphors through intuition and context. They need richer support to help them infer meaning (Ganji, 2001). Explicit instruction can help students realize and uncover their own ability to find semantic patterns and conceptualize metaphors (Yasuda, 2010; White, 2012; Lee, 2016; Al-Otaibi, 2019). Khatib and Ghannadi (2011) investigated the effect of teaching phrasal verbs using an implicit (contextualized) or explicit interventionist approach as compared to incidental learning (exposure, but no instruction). They found that those students who received explicit instruction outperformed those who received implicit instruction, and both methods of teaching outperformed incidental learning. Moreover, those students who received explicit instruction outperformed the other students in both recognition and production of phrasal verbs. This supports Ganji's (2001) conclusion that guiding students to implicitly infer meaning through context is helpful, but not as effective as explicit instruction.

Assuming that explicit instruction of phrasal verbs is important in recognizing and producing phrasal verbs, it seems apparent that the teacher likewise must receive explicit instruction, particularly if the teacher is a native speaker. Phrasal verbs function subconsciously in native speakers and need to be explicitly motivated through raising metaphor awareness before they can seem meaningful and logical (Boers, 2000; Andreou & Galantamos, 2008; Thom, 2017). This highlights the need for pedagogical models for native teachers of English, as their very fluency precludes awareness of metaphors in their own language.

Conceptual metaphors in particles.

One of the most fundamental senses that we have of the world is spatial orientation.

Cognitive linguistic studies and CMA have uncovered many orientational metaphors inherent in prepositions and adverbs, particularly when they function as particles (See Table 2.3).

Particle	Meaning	Examples
Up	Completion	Chew up, Use up, Give up
Up	More	Turn up, Play up
Up	Нарру	Cheer up, Buck up, Feel up
Up	Approach	Draw up, Bump up, Cuddle up
Up	Out of bed	Wait up, Stay up, Get up
Down	Raining	Beat down, Coming down, Pelt down
Down	Less	Cool down, Play down, Turn down
Down	Failure	Break down, Get down, Step down
Down	Writing	Jot down, Note down, Pin down
Down	Sad	Get down, Feel down
Down	Cleaning	Hose down, Scrub down, Wipe down
Off	Departure	Back off, Blast off, Bog off, Hare off
Off	Removal	Push off, Kick off, See off, Slip off
Off	Separation	Block off, Box off, Come off
Off	Completion/Success	Come off, Carry off, Pass off, Pull off
Off	Start	Get off, Kick off, Set off, Tee off
Out	Exclusion	Chuck out, Cross out, Cut out, Miss out
Out	Solution	Dig out, Drag out, Ferret out, Eke out
Out	Appearance	Bring out, Pick out, Slip out, Stick out
Out	Extinction	Back out, Beat out, Blow out, Duck out
Out	Extension	Open out, Carry out, Fan out, Deal out, Pass out

Table 2.3: Table of Particles and their Conceptual Metaphors (Ganji, 2011)

The root verb can code meaning and metaphor too, but it most often provides, through verbs of motion, a movement that can be directed and oriented in time and space (Rudzka-Ostyn, 2003). Without this direction, metaphorical senses and meaning can evaporate. For example, emotions can *heat up* or *cool down*; Emotions can even go or be *up* and *down*. But they do not heat and cool. It is in the orientational metaphors of particles where systematic patterns in

phrasal verbs start to emerge and polysemous meanings become interrelated (Brugman & Lakoff, 1988; Side, 1990; Tyler & Evans, 2003; Rudzka-Ostyn, 2003, Requejo & Diaz, 2008).

We can show some of these patterns and relationships by looking at the particle *up*. One primary metaphor for *up* is a "change in state along a vertical axis" (adapted from Rudzka-Ostyn, 2003). Prototypically, this would mean a change in state from low to high. But the prototypical vertical axis can be metaphorically extended to be an axis of height (short-tall), an axis of direction (north-south), an axis of a path (start-stop), and many more. Table 2.4 compares the polysemous meanings of some phrasal verbs with the particle *up*. The root word codes the motion (throw, pick, grow, move) and the particle directs either the object or the subject (when intransitive) to a higher position in increasingly metaphorical ways.

UP is a Change in State along a Vertical Axis				
Throw up a ball	Throw up your hands	Throw up your food		
Pick up an object	Pick up puzzle pieces	Pick up a room	Pick up a person in a car	
The flowers grow up Children grow up		He needs to grow up		
Move the camera up Move the car up a bit		Let's move up north	She's moving up in life	

Table 2.4: Abstraction of Phrasal Verbs with UP

Each of these axes can also be used to group verbs by metaphor. One common metaphor is the *path* metaphor or schema (see Table 2.5). If the vertical axis is extended to mean a path

UP is a Change in State Along a Path				
Up is BEGINNING	UP is APPROACHING a goal	UP is RESOLUTION		
Come up (emerge)	Catch up (reach)	End up (final state)		
Set up (prepare)	Keep up (maintain)	Give up (end action)		
Show up (appear)	Cuddle up (get closer)	Clean up (clean completely)		
Wake up (awake from sleep)	Pull up (get next to)	Hang up (end phone call)		
Take up (start a hobby)	Line up (form a line)	Break up (end relationship)		
Open up (start a discussion)	Back up (move back to goal)	Make up (one's mind)		
Turn up (appear)	Follow up (follow an action)	Sum up (complete a summary)		
Make up (create)	Gather up (group closer)	Shut up (finish talking)		

Table 2.5: Grouping Phrasal Verbs with UP According to Metaphor

with a starting point and an end point, the particle *up* can code a beginning, a movement towards a goal, and a final destination. These might also be termed more broadly *beginning*, *approach*, and *resolution*.

The image schema approach.

What CMA lacks, quite literally, is perspective. As White (2012) notes, "The particle, in combination with the literal or figurative sense of the verb, locates the phrasal verb's action or activity in a physical or metaphoric place, a place relative to the zone of activity" (p. 423). This "zone of activity," or perspective, cannot be represented by metaphor, but affects meaning nonetheless. It is usually coded through the root verb, rather than the particle. Consider for example the phrases "The sun is out," and "the light is out" (Neagu, 2007). The particle is the same, but the meaning is different because of the perspective; In the first sentence, the sun is coming out of the night towards the observer. In the second sentence, the light is going away from the observer. For a better understanding of perspective, it is important to look at another cognitive linguistic theory, the Image Schema Theory (Johnson, 1987).

The Image-Schema theory postulates that embodied experiences, which are the basis of conceptual metaphors, are represented as mental images in the mind (Johnson, 1987). These mental abstractions are used in reasoning to associate perception with concepts (Florian, 2020; Lee, 2016; Langacker, 2008; Johnson, 1987). Some basic image-schemas which undergird conceptual metaphors and provide a starting point for more complex image-schemas are the

container schema, the *part-whole* schema, the *link* schema, the *center-periphery* schema and the *source-path-goal* schema (Santibañez, 2002; Kövecses, 2006; Neagu, 2007) (See Figure 2.3).

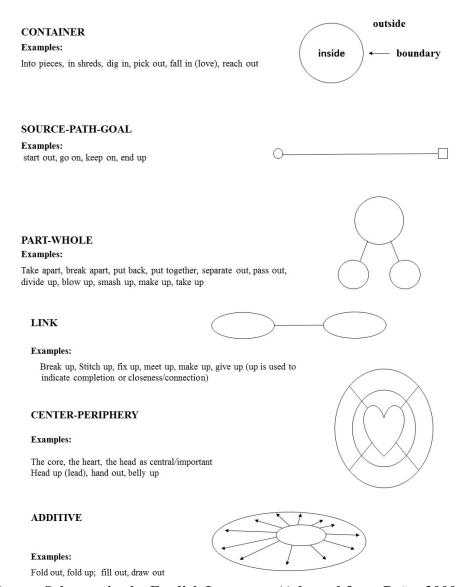


Figure 2.3: Image-Schemas in the English Language (Adapted from Peña, 2000 and others)

Many of these image-schemas interact figuratively. For example, the phrasal verbs *get into trouble* and *come into existence* utilize both the *path* schema and the *container* schema (Santibañez, 2002, p. 184).

The ability to form mental representations seems to be indispensable in learning (Kurtyka, 2001). Visualization enables internalization, or the "ability to carry out mental action

that has parallels on the material plane" (Lee, 2016 p. 169). In order to teach image schemas, however, they need to be materialized into an external form that can be used in pedagogical models. Various researchers have proposed ways to depict the mental image-schemas in phrasal verbs so that students can access them more easily. White (2012) taught students in one research study how to use a Scheme of a Complete Orienting Basis of an Action (SCOBA), based on Gal'perin's model (1989, cited in White, 2012). These are similar to mind maps or anchor charts commonly used in classrooms in that they are visual representations of what is happening, or needs to happen, in the mind. In White's model (figure 2.4), the SCOBA takes the form of hand-drawn personal sketches created by students, showing the zone of activity and perspective in material form.

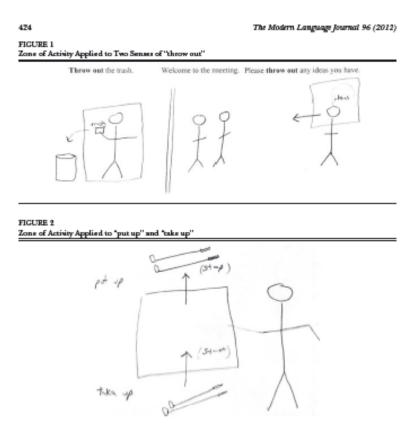


Figure 2.4: Example of a Student-Generated SCOBA (White, 2012)

Rudzka-Ostyn (2003) in contrast formalizes SCOBAs using abstract shapes. These shapes represent how English speakers tend to focus on a moving entity, termed Trajector (TR), and view it against a background, termed Landmark (LM), such as a container or a surface (Rudzka-Ostyn, 2003) (See Figure 2.5). Her method combines conceptual metaphor with a representation of an image-schema, and has been adapted by multiple researchers (Kurtyka, 2006; Requejo & Diaz, 2008; Thom, 2017)

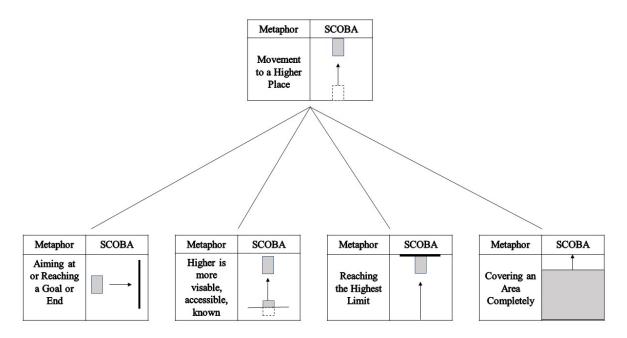


Figure 2.5: Metaphors and SCOBAs for UP (Rudzka Ostyn, 2003; Lee, 2016)

Effective Teaching: Visualization

Research by Talebinezhad and Farhadian (2014) compared CMA and image schema as a teaching method using Tyler and Evans' (2003) and Lakoff and Johnson's (1980) models. They found the Tyler and Evan's focus on the systematicity of particles to be most effective for students. This may have been because Lakoff and Johnson's CMA method lacked any

materialization of image schemas or perspective, while the Tyler and Evan's approach included a comprehensive theoretical analysis with images representing perspective and context. This conclusion highlights the effectiveness of visuals in the teaching of metaphorical language.

The dual-code theory supports the importance of visuals in the classroom. It suggests that the human mind has two interconnected memory systems: verbal and visual (Stevick, 1996, cited in Kurtyka, 2001). Although concrete objects or actions are easy to represent visually in the mind, abstract words are more difficult, and are generally stored verbally instead of visually. But if a visual representation can be constructed, this enhances storage and retention (Bransford, 1979, 1996, cited in Kurtyka, 2001). Moreover, Gehring and Toglia (1989) concluded that "retention of images is enhanced if these images are actually perceived rather than merely created in the mind" (cited in Kurtyka, 2001, p. 5). If the notion of conceptual metaphor is going to be successfully adapted for pedagogical purposes, it must include visual representations, perspective, and analysis based on careful thought and historical/sociocultural background (Boers, 2000; Kurtyka, 2001). Otherwise, metaphors become, like the idiomatic meanings of phrasal verbs, simply another list to memorize (Talebinezhad & Farhadian, 2014).

The Gap in the Literature

Multiple studies show that understanding and conceptualizing metaphors and spatial orientation are central to the memorization, retention and prediction of the meaning of phrasal verbs (Ganji, 2011; Kartal & Uner, 2017; Kövecses & Szabco, 1996; Nhu & Huyen, 2009; Nhu, 2010; Yasuda, 2010; Talebinezhad & Sadri, 2013). Those studies that did not corroborate with the data suggested that confounding factors might have influenced the result. These factors

include attempting to teach too many metaphors at once, attempting to teach to many particles or verbs at once, or not making enough use of visuals (Al-Otaibi, 2019; Boers, 2000; Karahan, 2015). The cultural expectation that learning is equated with memorization (Lu & Sun, 2017; Yang & Hsieh, 2010) and the focus on implicit learning without explicitly teaching orientational metaphors (White, 2012) also contributed to a null result.

What these studies did not show was whether conceptual metaphors and image schemas might be useful in teaching beginning learners or children. Most researchers assumed that these conceptual approaches would only be useful for intermediate to advanced students, as beginning students likely did not have enough words in their lexis to consider abstract concepts (Boers, 2000). Studies also showed that more advanced learners are more likely to use phrasal verbs (Jahedi & Mukunkan, 2015; Lu & Sun, 2017). However, as stated previously, this may be due to the lack of appropriate pedagogical material. Beginning students do study simple verbs of motion, prepositions, and adverbs – the building blocks for phrasal verbs. They will also encounter phrasal verbs regularly both in print and on the proverbial playground. Given that research suggests metaphors are foundational to language and thought, and that spatial orientation is fundamental to how English speakers view the world beginning in childhood, it seems natural to assume that the teaching of the metaphors in phrasal verbs should be foundational rather than an appendage to language learning.

The few studies that examined a different population in terms of age and ability verbs generally supported this possibility. One study researched the impact of CMA on junior high students with basic English proficiency in Taiwan and found that the technique did significantly improve scores (Yang & Hsieh, 2010). Fujii (2016) found that Schema-based instruction (SBI) worked more effectively for learners with a higher proficiency level but suggested that this might

be because beginner level students need a greater amount of scaffolding and more illustrative example, as his lesson did not include much explicit instruction. Mitsugi (2013) recommended that explicit teaching of core meanings and schemas should be done at an earlier point in the process of language learning so that advanced students do not have to relearn previously constructed images. Less advanced students might be more open to a new method of teaching and more likely to absorb a new schema.

Chapter 3: Project Design

Conceptual metaphor and image-schema theories may in fact lend themselves to pedagogy that is accessible to less advanced and younger students. Visual images, stories and symbols, and the creation of learning "tools" can all be accessed with a relatively low vocabulary level. However, Cognitive linguistics-inspired materials have yet be translated from the pages of scholarly writings and adapted for the beginner classroom (Lee, 2016).

Many researchers have recognized the need for new pedagogical material on phrasal verbs and offered suggestions. Boers (2000) provided a sample lexis and texts in his paper. Lee (2016) created a 10-step table for Concept-Based Instruction of Phrasal Verbs and provided examples of verbalization activities. Kurtyka (2001) recommended combining Rudzka-Ostyn's images with the learning cycle approach. Requejo & Diaz (2008), White (2012), and Thom (2017) all created SCOBAs and suggestions for use in teaching. However, despite the increasing amount of research in this area, there continues to be a gap between theory and practical instruction, and a consensus among researchers that this could and should be improved (White, 2012; Spring, 2018).

The creation of a website will be a way to apply cognitive linguistics research to lesson plans and ideas for the average classroom. I will create three open-source lesson plans designed to help teachers introduce phrasal verbs to less advanced and younger students through conceptual metaphor, image schema, and particle-based instruction. Short blog posts, videos,

and images will support these lessons. I will especially focused on creating teaching materials that are

- 1. More accessible to lower level students and children
- 2. Visual and/or kinesthetic
- 3. Focused initially on particles *on*, *up*, and *out*
- Based on research in Concept-Based learning, Cognitive Semantics, and Clay
 Modeling

Concept-based instruction (CBI) lends itself to working with children and beginners. It includes the theories that concepts (not rules) are the currency of instruction, material aids or tools help learners understand concepts, and verbalization prompts learners to internalize concepts (Lee, 2016, White, 201). The creation of tools such as drawings, models, mind maps and charts, taps into students' own idiosyncrasies and creativity (White, 2012). The first lesson plan will involve the creation and illustration of a story that contexualizes the phrasal verb *go on* and its polysemous meanings.

The phrasal verb *go on* has been identified as the most commonly used phrasal verbs in the English language (Garnier & Schmitt, 2015) with as many as 21 distinct meanings (White, 2012). Many of the meanings are derived from conceptual metaphors. Rather than analyze this phrasal verb and the particle, as one might do with adults and more advanced students, a story places the meaning into context, allowing for inferencing. As students illustrate what they think is happening, the self-made illustrations will act as SCOBAs or visual tools to support conceptualization of the material. This may help children and beginning learners to see patterns and semantic connections without having to use words. The lesson plan will draw particularly on White's (2012) approach to the instruction of phrasal verbs.

The second plan will involve exploring the core sense of the particle *out* provided by cognitive semantics through clay modeling. According to Serrano-Lopez (2003), clay modeling of prepositions is a visual/spatial/kinesthetic methodology based on the Davis Symbol Mastery Program for dyslexics designed to help create new mental representations of spatial concepts. Like dyslexics, foreign language learners often have difficulty creating a mental image of abstract words, such as adverbs and prepositions. This three-dimensional way to represent the core spatial meaning of particles allows students to fix a mental image in their minds and then visually extend meaning to more abstract, metaphorical senses (Requejo & Diaz, 2008).

Analysis through clay modeling offers the following additional benefits. Clay modeling:

- supports the tenets of the conceptual approach to instruction; that is, it provides a
 tool-and-result methodology (Newman & Holzman, 1993, cited in White, 2012),
 produces results through production and creation (White, 2012) and is discovery
 based.
- 2. when produced by students, represents reality in a recognizable way, creating a memorable picture or concept in the mind rather than relying on verbal memory (Serrano-Lopez, 2003).
- encourages metacognition through "Inner Speech," meaning thinking about what you are modeling and why (Serrano-Lopez, 2003).
- 4. is generally considered to be "fun" and increases motivation to learn (Serrano-Lopez, 2003).
- 5. like drawing, provides a way for students to verbalize the story behind their creation.

 This verbalization leads to internalization (Lee, 2016; Serrano-Lopez, 2003).

6. supports dual coding theory – the theory that the association of verbal information with a mental image facilitates recall (Boers & Lindstromberg, 2008, Serrano-Lopez, 2003).

The lesson plan will draw upon research by Serrano-Lopez (2003) in clay modeling, and instruction on core meaning (Fujii, 2016; Mitsugi, 2013).

The third plan will involve semantic mapping of the source domain on to the target domain through anchor charts and graphics (Kovecses & Szabco, 1996). SCOBAs and conceptual metaphors provided by Rudzka-Ostyn (2003), White (2012), and Chitty (2014), will inform the creation of pictoral anchor charts about the particle *up*, on which the students can group novel phrasal verbs. This categorization of verbs encourages "deep-level cognitive processing" (Boers, 2000, p. 563), and metaphoric themes provide a framework for lexical organization (Boers, 2000). It also provides a channeling device for learners to organize new figurative language that they are exposed to (Boers, 2000). The lesson plan will draw upon recommendations by Boers (2000) and Spring (2018).

In order to make these lesson plans available to teachers, the plans will be uploaded as open educational resources (OER) on a blog entitled "Illustrating English." OER has great potential to benefit the field of ESL/EFL, as there is a need all over the world for inexpensive quality learning materials for ELLs (Heitin, 2016).

Chapter 4: Final Project

For my project, I have created a website with a blog that introduces cognitive linguistic concepts in a more accessible way and provides visual materials and lesson plans for teaching phrasal verbs. Additionally, it provides a space for highlighting the contributions of others and access to open educational resources (OER). It is designed for English language teachers (ELT) who can understand some complicated terminology, but who will appreciate the translation of that terminology into everyday English, as well as supporting graphics, videos, and lesson plans to illustrate concepts.

Prior to creating this website, I asked three teachers which would be of most use to them: a hardcopy booklet/manual with activities and lesson plans; a website where they might access videos and lesson plans; or a learning module on Moodle. Interestingly, each teacher replied differently. Each of the options received one vote. In light of this, I felt that a blogging website would offer the most flexibility and access for teachers. I could upload booklets or short manuals, and teach short lessons. As a result, most of the information on the website is contained in the blog.

On the blog, I have tried to highlight multiple approaches taken from cognitive linguistic research on phrasal verbs and particles. The blog format has allowed for small posts on each topic, additional posts connecting relevant topics, and room for further research in the future.

My hope is that if a teacher finds a lesson or topic that they like, they can find more information

on that topic in another blog post, find visual examples, videos and relevant materials, or post a question to the site.

The homepage begins with describing the purpose of the site and directs users to read the page on phrasal verbs and continue to the blog. The page on phrasal verbs (Figure 4.1) puts an emphasis on making phrasal verbs more visual and accessible, gives a light-hearted introduction to phrasal verbs (Figure 4.2) and emphasizes the need to understand imagery and metaphor. This is followed by a gallery of images (Figure 4.3) from blog posts.



Figure 4.1: Graphics for Page on Phrasal Verbs

ABOUT PHRASAL VERBS

Phrasal verbs are those pesky verbs that combine a verb with a preposition or adverb (which we will call a verb *particle*). The meaning of these verbs doesn't seem to have anything to do with the root verb or particle. When Susie throws up, what does she throw exactly? Or if Kevin gives in, does he give anything? They don't seem to make sense...but there are SO MANY of these verbs in English, and new ones are being created every day! It's 2020, and I just spotted a road sign saying "Mask up!" Well good news...these little verbs actually do have some logic to them, but in order to understand the logic (without reading pages upon pages of research), we need to take you (and your students) through some visualization exercises into the world of metaphor and imagery.

Figure 4.2: Introduction to Phrasal Verbs

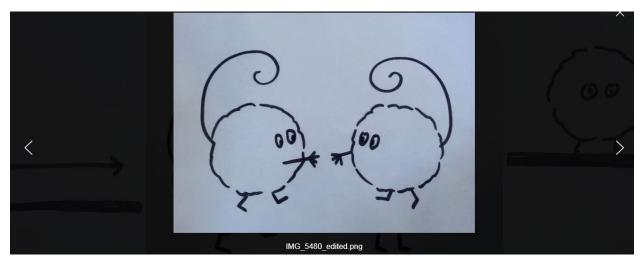


Figure 4.3: Gallery of Images

Below the gallery is a video of a powerpoint presentation on the foundational concept of "Image Schemas," which are abstract concepts of spatial relationships that the human mind uses to organize information (see Appendix A: Images and Metaphor Powerpoint). The page finishes with a quote from Andrzej Kurtyka (2007) which reads, "Visualization,…the ability to form mental representations of verbal and non-verbal input, seems to be indispensable in learning."

Most of my attempts to make phrasal verbs and relevant concepts visual are located in the blog. Rather than overwhelm this paper with blog posts, I will highlight here one of the lesson plans: Lesson Plan #1 (Appendix B). For this lesson, I used White's (2012) suggestion that students create their own SCOBAs. However, instead of using complicated terminology, I created a story designed to introduce the variety of meanings of the verb *go on*. During the lesson, the students are explicitly shown how the meaning of the particle *on* can be extended from the prototypical meaning *contact* to meanings such as *continue* and *connection* using hand-drawn images and props. How to use the images and props are explained through videos in other posts (Figures 4.4 and 4.4)



Figure 4.4: How to Use Images to Explain Meaning



Figure 4.5: How to Create Landmark and Trajector Props

Then the students are asked to listen to a story, infer meaning, draw what they think is happening. The story is called *Go on, Butterfly!* (Appendix, C) and uses all the meaning senses of the verb *go on*, plus a few idiomatic phrases with *on*. Pictures to scaffold meaning, such as a butterfly and caterpillar, are included on the blog.

The lesson is designed for upper level beginning to intermediate students and children. While these students might not recognize the word "infer," let alone write it, they can listen and draw what they understand. In this way, complex concepts are simplified and made accessible to them.

I am most proud of my creation of tools that teachers can use to illustrate concepts. The pompom prop can be adapted for visual and kinesthetic learning, and the hand-drawn images can either be printed or replicated by teachers for use in the classroom. I also created:

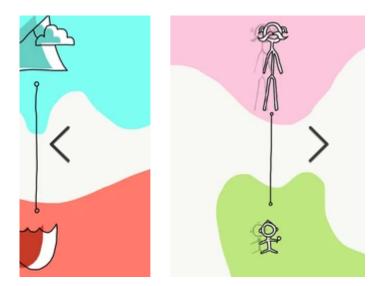
1. Videos identifying core meaning:



2. Videos on clay modeling:



3. Beautiful graphics created with my daughter to illustrate concept mapping:



4. A video illustrating how to map phrasal verbs with *up* onto the different meaning senses.



I hope that this website will be a forum for highlighting resources for ELTs, a place to access and post open educational resources, and a unique space for English language research to be visually translated for use in the classroom.

Chapter 5: Conclusion

Looking back on the process of research, creativity, and presentation, I am struck by how far I have come, and how much more work there is to do. There is an enormous amount of research in the cognitive linguistics field that supports a change in the way abstract language, such as prepositions, and figurative language, such as phrasal verbs, are taught. But there is a great deal of work still to be done to bring that knowledge into the classroom.

In my effort to create materials that bridge the gap between research and teaching, I reached out to another ELT who had started a website and sold ESL resources to support the learning of phrasal verbs. I sent my story "Go On, Butterfly" to him, and he recommended I make sure to copyright my work. Not knowing anything about copyright law, I did some research and discovered Creative Commons Licensing. This Non-Profit organization provides a way to license your work and share it free of charge with the online community. In their own words, they "help overcome legal obstacles to the sharing of knowledge and creativity to address the world's pressing challenges" (Creative Commons, 2020). It is through openly licensed material that the world has access to many of the images, research papers, patents, computer codes, and educational resources that it does today.

Open educational resources (OER) has seen a flourishing of interest over the last five years (McKenzie, 2020). Charitable organizations such as the Hewlett Packard Foundation have funded awareness campaigns, increased the availability of free textbooks at community colleges, and promoted the democratization of knowledge (MacKenzie, 2020; William and Flora Hewlett

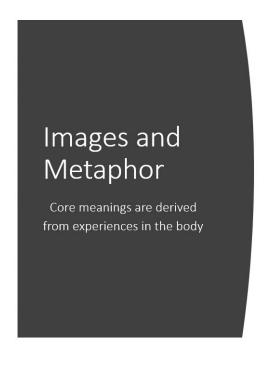
Foundation, 2020). And since the beginning of the pandemic, more educators than ever are redesigning curricula and open to exploring new materials – particularly low cost, accessible, flexible, and digital materials, such those found in OER (McKenzie, 2020). In the near future, I hope to post my website and/or materials on OER databases, such as OER Commons, so that teachers might have more easy access to those resources. As far as I can tell, there is only one post on phrasal verbs in OER Commons, and it does not take advantage of cognitive linguistic approaches.

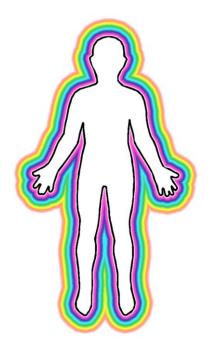
In the future, I see myself making connections with illustrators, other ESL teachers, and researchers as I discover more creative ways to bring research into the classroom. As I broaden my career path, I hope to have the opportunity to test these ideas with students and improve them. I also hope to use the website I have created as a repository for future materials and a way to share them with the world. I enjoy the creativity involved in making language learning visible and creative, and I love to make learning fun.



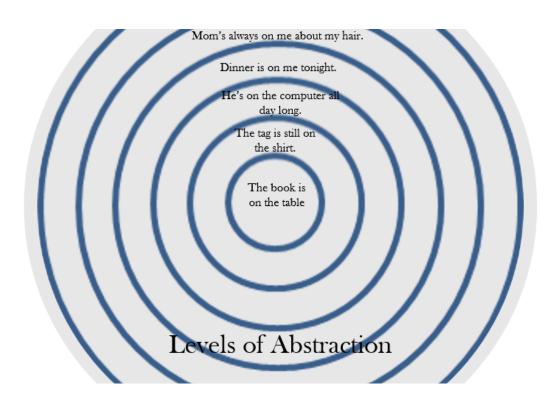
Appendix A: Images and Metaphor Powerpoint

Slide 1: The conceptual way that we view the world originates from experiences within the human body. We walk on the road. Our head is up. Our feet are down. We hold food in our hands. These experiences form the core meanings of language units, such as spatial prepositions.



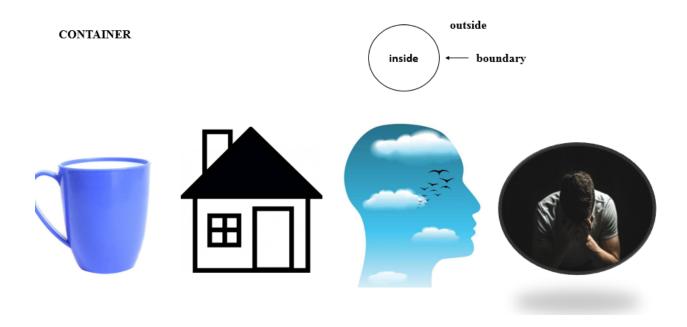


Slide 2: From the core meaning, human beings learned to create further levels of meaning through abstraction. For example, the core meaning of the word "on" is "contact with a surface." This can be abstracted to mean a connection between two distinct surfaces, support, and pressure.



Slide 3: Here are a few of the core images schemas, called spatial primitives, that have been identified as present in all languages: CONTAINER, PATH, PART-WHOLE, CENTER-PERIPHERY, and LINK. There are many, many, image-schemas in our minds, and no one has yet identified the exact number or relative importance of even the most basic schemas. But knowing a few core schemas will help us to visualize some of the ways we form abstract concepts from concrete information.

Core Image-Schemas Also Know as Spatial Primitives outside boundary

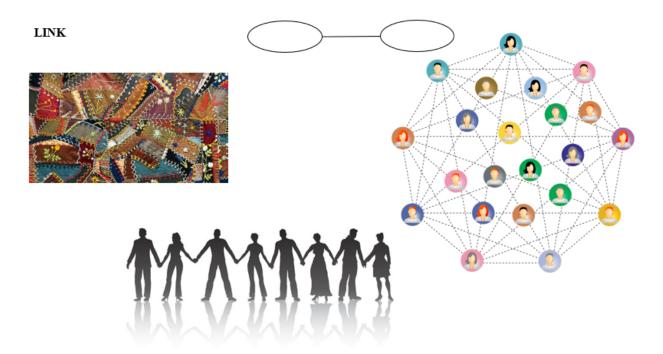


Slide 4: Let's talk about one of these spatial primitives, the CONTAINER schema. A cup is a container. We can have water in the cup or we can pour water out of the cup. We can fill the cup up with water. The bottom and sides are part of the cup. The handle is on the cup. And if I drop the cup, the handle will break off. Simple, right? But it turns out we can conceive of many things as metaphorical containers. Houses, cities, countries, anything with a conceivable limit or boundary can be containers. We get out of the house, head into the city, and vacation in Spain. Our bodies are containers for our emotions. We can be deep in thought or toss out ideas. We can be in love or shout out in anger. Groups are containers. We stand out in a crowd. We pick out clothes to wear so that we can fit in socially. Even states can be containers. We can be on edge (on the edge of a hypothetical container of trouble), in the middle of a fight, or out of money

SOURCE-PATH-GOAL

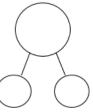


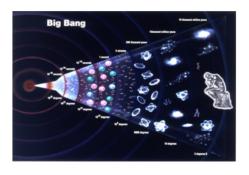
Slide 5: The PATH Schema is another common schema, often including a source and an end goal. This concept – that life is a journey, that change is movement, that purposes are destinations, can be found throughout storytelling, film, and autobiographies. Time too is conceived of as a path, whether that be an upward path in Chinese, or a horizontal one in English. And the concept of walking on a path – whether starting, continuing, or achieving the end goal, - is the source of many well-known English phrases such as go on! and catch up.



Slide 6: When infants experience a person or toy interacting with them, they experience this as a link Johnson (1987) noted that we are involved in an "ongoing process of linking, bonding, and connecting that gives us our identity." These links can be weak or strong, indicating either a tenuous connection, or a strongly connected unit. A concrete example of a link are the stitches used in sewing a quilt together. This can be abstracted to other types of connections. For example, the sentence "the businessman stitched up major deals all over the world" indicates many business connections. "His life is coming apart at the seams" indicates the unravelling of connections with family and work. A tightly integrated whole, such as a well-reasoned and supported court case might be termed "seamless" (Santibanez, 2002).

PART-WHOLE

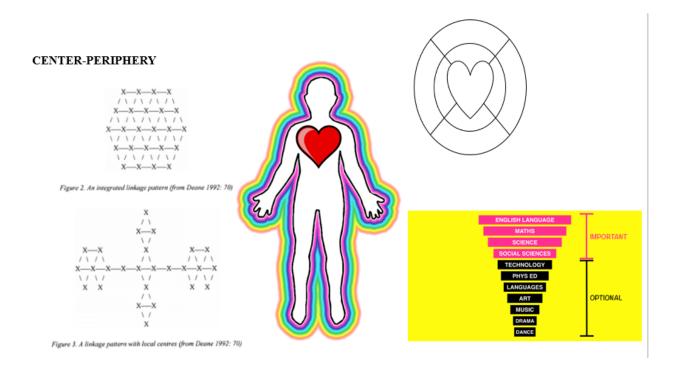






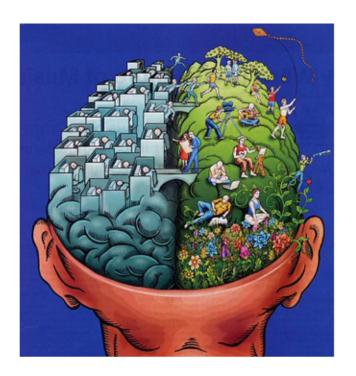


Slide 7: The part-whole schema is a microcosm of how the brain organizes information. Words are fitted together in groups of meaning. For example, eyes, nose, hands, feet, legs, are all part of a body, while multiple bodies connect to form a family or a society. Similarly, corgies, basset hounds, pugs and poodles are all dogs, while dogs, cats, and turtles are all animals. The concept of organization is a main part of this schema. This conception of the world as organized or constructed from disparate parts leads to the common metaphor "Organization is Physical Structure." So, we build an argument, form plans, and construct theories with links, connections, or supports of varying strength. If the links aren't strong enough, our argument may fall apart. Or if the links connecting two people aren't strong enough, they may break up.



Slide 8: In the Center-Periphery Schema, the periphery depends on the center, and not the other way around" (Santibanez, 2002, p. 194) The center, or core, is more important than the periphery. In the part-whole schema, a destruction of the parts means a destruction of the whole, while in this schema the core can exist as a separate unit. So, we can say, "Despite radical changes, the heart and soul of the organization is still alive," Or, "We argued over the details, but the core of the idea was sound." We also see this in hierarchies. "The core of the programit is the emphasis on STEM disciplines," or "The heads of state met on matters of great importance."

Metaphors add Richness to Language



Slide 9: Metaphors add richness and depth to language. In future videos and posts, we will show how phrasal verbs are a shortened way to access many conceptual metaphors with a simple verb and particle. This is likely why they are used so much in the English language. With the simple phrase "I will get over it," we express the continuation of time, a journey, and healing." With the comment, "I'm glad he finally came out with it," we hear an emergence of a secret into visibility." And these metaphors often act as euphemisms, easing tensions and allowing the serious to be softened into something more casual and accessible. "I'm sorry she died," is somehow not as sweet as "I'm sorry she passed on." As important as phrasal verbs are to accessing the English language, it becomes important to understand the metaphors and spatial concepts behind these words.

Appendix B: Lesson Plan #1

Lesson Plan: "Go on, Butterfly" by Serena Gammon

Purpose: To engage students in the discovery of meaning in the phrasal verb *go on*Students will be able to identify the core meaning of *on* and use basic images-schemas (abstract images) to guess the meanings of *go on* in a story.

Materials:

- The story "Go on, Butterfly"
- Laminated image schemas
- Additional vocabulary images
- pencils and erasers
- Coloring materials crayons, colored pencils, or markers
- Whiteboard and wet or dry erase markers, or chalkboard and chalk

Lesson:

- Write the words GO and ON on the board in separate locations. Ask the students what they mean. Draw examples of their descriptions a box with an arrow, or a person walking; a table or surface.
- Now, write the words together, as the phrasal verb *go on*. Ask the students to come to the board and draw a picture of what *go on* might mean. Encourage creativity, but finish by labeling the trajector and landmark with concrete labels: Is the surface time and the trajector a mouth (go on continue speaking)? Or the surface is a bus and the trajector is a person (He goes on the bus).
- Use premade laminated image schemas to identify the possible meanings of *on* with the students (contact; connection; continuation; support; pressure/responsibility; change; beginning or proceeding to a new event, etc.). Use a wet erase marker to label trajectory and landmarks if needed for clarity.

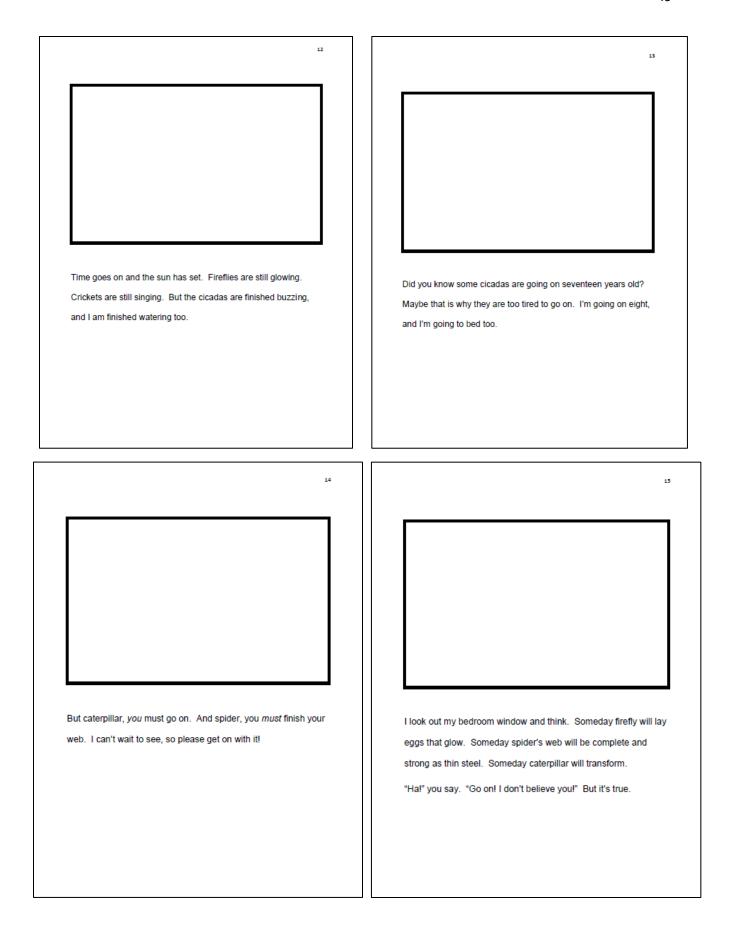
- Give students the "Go on, Butterfly" story with space to draw their own illustrations.
- Read the story, one page at a time, using extra vocabulary images to explain words like
 "caterpillar" and "parsley." Ask the students to draw what they think is happening in the
 story.
- You might only complete a few pages in one lesson. But afterwards, take the pictures, and make a gallery on the wall. During the next lesson, have the students look at the pictures and discuss what the verb "go on" might mean in that section of the story.

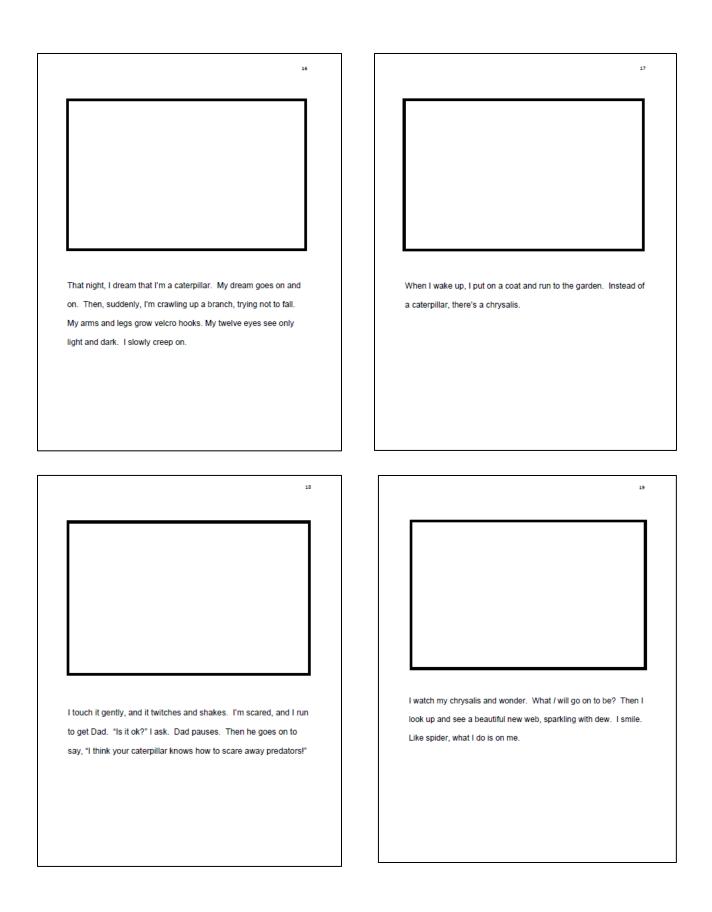
Assessment: Students write and illustrate their own story with the verb go on.

Appendi	x C: Illustration Activity
Go On, Butterfly! ILLUSTRATING THE PHRASAL VERB "GO ON" BY SERENA GAMMON This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0	Caterpillar is on my parsley, but I don't mind. Go on, caterpillar – go onto my parsley and eat up!
This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, with http://creativecommons.org/licenses/by-nc- sa/4.0/ or send a letter to Creative Commons, P. 08 out 886, Mountain View, C.4 \$4042, U.S.A.	
I will not hurt him - I'm on his side. And I know he has work to do.	I have work to do too. I have to water the garden. But I don't mind – I can do it! I'm on it!

I stop to listen to the music around me. Sing on, grasshoppers! Sing on crickets!	The cicadas sing too, but their buzzing drives me crazy. They go on and on and on without stopping.
Now the fireflies are flying by! Their lights turn on and off, on and off. I feel on top of the world. Go on going on, fireflies!	Now I see spider spinning a web. Keep on keeping on Miss Spider. I want to help - but that job is on you!

8	
Hook back at my garden. What's going on now, caterpillar? You	Spider stepped spinning too. Does she have anough thread to go
stopped eating. Don't go on a diet yet!	Spider stopped spinning too. Does she have enough thread to go on, or will she run out? Will she finish her web?
10	11
Now caterpillar starts to climb. The first branch doesn't look right.	He can't see very well. The hairs on his body help him feel his
He goes on to the next.	way onward.





20 For two weeks I wait. The crickets go on. The cicadas go on. Life goes on. Then one morning, my caterpillar is gone. No, not gone, just different. Changed. He is going on to new adventures. Go on, butterfly!

References

- Alangari, M., Jaworska, S. & Laws, J. (2020). Who's afraid of phrasal verbs? The use of phrasal verbs in expert academic writing in the discipline of linguistics. *Journal of English for academic purposes 43*,100814. https://doi.org/10.1016/j.jeap.2019.100814
- Al-Otaibi, G. M. (2019). A cognitive approach to the instruction of phrasal verbs: Rudzka-Ostyn's model. *Journal of Language and Education*, *5*(2), 10-25.

 DOI:10.17323/jle.2019.8170
- Andreou, G., & Galantomos, L. (2008). Designing a conceptual syllabus for teaching metaphors and idioms in a foreign language context. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, (9), 69-78.

 http://www.ugr.es/~portalin/articulos/PL numero9/5%20Georgia.pdf
- Boers, F. (2000). Metaphor awareness and vocabulary retention. *Applied linguistics*, 21(4), 553-571. https://doi.org/10.1093/applin/21.4.553
- Boers, F. (2003). Applied Linguistics perspectives on cross-cultural variation in conceptual metaphor. *Metaphor and symbol 18*(4) 231-238. DOI: https://doi.org/10.1207/S15327868MS1804_1
- Boers, F., & Demecheleer, M. (1998). A cognitive semantic approach to teaching prepositions. *ELT journal*, *52*(3), 197-204. Cambridge Dictionary (2020). *Phrasal verbs and multi-word verbs*. https://doi.org/10.1093/elt/52.3.197

- Cambridge University Press. https://dictionary.cambridge.org/us/grammar/british-grammar/phrasal-verbs-and-multi-word-verbs
- Charteris-Black, J. (2002). Second language figurative proficiency: A comparative study of Malay and English. *Applied Linguistics*, 23(1), 104-133. https://doi.org/10.1093/applin/23.1.104
- Creative Commons (2020). What we do. Creative Commons. https://creativecommons.org/about/
- Crutchley, A. (2007). Comprehension of idiomatic verb+ particle constructions in 6-to 11-year-old children. *First Language*, *27*(3), 203-226. https://doi.org/10.1177/0142723707078317
- Dagut, M., & Laufer, B. (1985). Avoidance of phrasal verbs—A case for contrastive analysis. *Studies in second language acquisition*, 7(1), 73-79.https://www.jstor.org/stable/44488547
- Evans, V., & Tyler, A. (2004). Spatial experience, lexical structure and motivation. *Studies in linguistic motivation*, 157-192.

https://books.google.com/books?hl=en&lr=&id=9mGxBZsodzMC&oi=fnd&pg=PA157&dq =Spatial+experience,+lexical+structure+and+motivation&ots=SndcogNxD-

&sig=WsgShn6zEn8l-

iZBJzWe1NJqm6k#v=onepage&q=Spatial%20experience%2C%20lexical%20structure%20a nd%20motivation&f=false

Florian, Jasmin. *Applying concepts from cognitive linguistics to your conlang*. Slideserve. https://www.slideserve.com/JasminFlorian/applying-concepts-from-cognitive-linguistics-to-your-conlang

- Fujii, K. (2016). Effects of Leaners' English Proficiency Level in Learning English Prepositions through the Schema-Based Instruction. *English Language Teaching*, 9(10), 121-132. https://eric.ed.gov/?id=EJ1116514
- Ganji, M. (2011). The best way to teach phrasal verbs: Translation, sentential contextualization or metaphorical conceptualization. *Theory and Practice in Language Studies*, *I*(11), 1497-1506. doi:10.4304/tpls.1.11.1497-1506
- Gardner, D., & Davies, M. (2007). Pointing out frequent phrasal verbs: A corpus-based analysis. *TESOL quarterly*, 41(2), 339-359. https://doi.org/10.1002/j.1545-7249.2007.tb00062.x
- Garnier, M., & Schmitt, N. (2015). The PHaVE List: A pedagogical list of phrasal verbs and their most frequent meaning senses. *Language Teaching Research*, *19*(6), 645-666. https://doi.org/10.1177/1362168814559798
- Jacobsen, H. (2013). Figuring out phrasal verbs: An analysis of student use and fluency in Swedish upper secondary schools [Master's thesis, Linnaeus University]. Digitala Vetenskapliga Arkivet. diva2:603452
- Jahedi, M., & Mukundan, J. (2015). A review on studies of phrasal verb constructions in ESL context. *Advances in language and Literary Studies*, 6(1), 157-162. http://www.journals.aiac.org.au/index.php/alls/article/view/687
- Karahan, P. (2015). The effect of conceptual metaphors on Turkish EFL learners' comprehension and production of phrasal verbs. *International Journal of Linguistics and Communication*, 3(1), 76-86. http://ijlcnet.com/journals/ijlc/Vol 3 No 1 June 2015/10.pdf

- Kartal, G., & Uner, S. (2017). The effects of conceptual metaphors on the acquisition of phrasal verbs by Turkish EFL learners. *European Journal of Foreign Language Teaching*, *Online Submission*, 2(2), 34-51. https://eric.ed.gov/?id=ED573743
- Khatib, M., & Ghannadi, M. (2011). Interventionist (explicit and implicit) versus non-interventionist (incidental) learning of phrasal verbs by Iranian EFL learners. *Journal of Language Teaching and Research*, 2(3), 537. doi:10.4304/jltr.2.3.537-546
- Kovecses, Z., & Szabco, P. (1996). Idioms: A view from cognitive semantics. *Applied linguistics*, 17(3), 326-355. https://doi.org/10.1093/applin/17.3.326
- Kurtyka, A. (2001). Teaching English phrasal verbs: A cognitive approach. Applied cognitive linguistics II: Language pedagogy, 29-54.
 https://books.google.com/books?hl=en&lr=&id=CJx7sHijLNIC&oi=fnd&pg=PA29&ots=7g
 JbAUtpHx&sig=vK7t hHgoAAUD4LfO2RgHzFsDd4#v=onepage&g&f=false
- Lakoff, G., & Johnson, M. (2008). Metaphors we live by. University of Chicago press.
- Langacker, R. W. (1982). Space grammar, analysability, and the English passive. *Language*, 22-80. https://www.jstor.org/stable/413531
- Langacker, R. W. (1986). An introduction to cognitive grammar. *Cognitive Science*, 10(1), 1-40. https://doi.org/10.1016/S0364-0213(86)80007-6
- Lee, H. (2016). Concept-based instruction: Imagistic and metaphorical understanding of phrasal verbs. *ENGLISH TEACHING (영어교육)*, 71(4), 167-191.
 - http://journal.kate.or.kr/wpcontent/uploads/2017/01/201701_07.pdf
- Lee, H. (2011). Concept-based approach to second language teaching and learning: Cognitive lingusitics-inspired instruction of English phrasal verbs (Doctoral dissertation, Pennsylvania State University). https://www.proquest.com/docview/1038138229

- Lu, Z., & Sun, J. (2017). Presenting English polysemous phrasal verbs with two metaphor-based cognitive methods to Chinese EFL learners. *System*, *69*, 153-161. https://doi.org/10.1016/j.system.2017.07.016
- Mandler, J. M. & Canovas, C. P. (2016). On defining image schemas. *Language and Cognition*, 6(4), 510-532. http://journals.cambridge.org/abstract-51866980814000143
- Mariano, T.F. (2019). An Outline of the Semantic Network of the Preposition Up in American English: A Corpus Study. https://umu.diva-portal.org/smash/get/diva2:1303298/FULLTEXT01.pdf
- McKenzie, L. (13 August, 2020). Window of opportunity for OER. Inside Higher Ed.

 https://www.insidehighered.com/news/2020/08/13/pandemic-drives-increased-interest-open-educational-resources
- Mitsugi, M. (2013). The effectiveness of core meaning based instruction on preposition choice. *Research bulletin of English teaching*, *10*, 1-25. http://www.jacethokkaido.org/JACET_RBET_pdf/2013/Mitsugi_2013.pdf
- Neagu, M. (2007). English verb particles and their acquisition: A cognitive approach. *Revista*española de lingüística aplicada, (20), 121-138.

 https://www.researchgate.net/profile/Mariana_Neagu2/publication/28201844_English_verb_particles_and_their_acquisition_a_cognitive_approach/links/5cf7883b299bf1fb185995b1/English-verb-particles-and-their-acquisition-a-cognitive-approach.pdf
- Nhu, N., & Huyen, P. (2009). Conceptual metaphor and its application in teaching phrasal verbs to English majors at Thuc Hanh High School, HCMC. *HCMC University of Education*, 13-26. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.476.9381&rep=rep1&type=pdf

- Oxford University Press (2020, October 7). *Phrasal verb*. Encyclopedia.com.

 https://www.encyclopedia.com/literature-and-arts/language-linguistics-and-literary-terms/language-and-linguistics/phrasal-verb
- Paulmann, S., Ghareeb-Ali, Z., & Felser, C. (2015). Neurophysiological markers of phrasal verb processing: evidence from L1 and L2 speakers. Retrieved from http://repository.essex.ac.uk/11361/
- Perdue Online Writing Lab (2020). Overview of two-part (phrasal) verbs (idioms). Perdue

 University.

 https://owl.purdue.edu/owl/general_writing/mechanics/two_part_phrasal_verbs_idioms/index
- Raddaoui, A. H. (2004). Fluency: A quantitative and qualitative account. *The Reading Matrix*, 4(1).

.html

- http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.126.7143&rep=rep1&type=pdf
- Requejo, M. D. P., & Díaz, C. P. (2008). A cognitive approach to some phrasal verbs in English for Specific Purposes. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE)*, (16), 109-128. https://core.ac.uk/download/pdf/25903672.pdf
- RIT. SEA Supporting English acquisition. Rochester Institute of Technology. https://www.rit.edu/ntid/sea/processes/phrasal/grammatical/syntax
- Rudzka-Ostyn, B. (2008). Word power: Phrasal verbs and compounds: A cognitive approach.

 Walter de Gruyter.
- Santibáñez, F. (2002). The object image-schema and other dependent schemas. *Atlantis*, 183-201. https://www.jstor.org/stable/41055078

Serrano-Lopez, M. A. (2003). Three-dimensional clay modeling instruction: A pathway to spatial concept formation in second language learners.

https://repository.arizona.edu/handle/10150/289954

Side, R. (1990). Phrasal verbs: Sorting them out. *ELT*, *44*(2), 144-159. https://doi.org/10.1093/elt/44.2.144

STUDYANDEXAM (2018). *Types of phrasal verb*. Studyandexam.com. https://www.studyandexam.com/types-of-phrasal-verb.html

Sadri, E., & Talebinezhad, M. R. (2013). Contribution of cognitive linguistics to TEFL: presenting conceptual meaning in phrasal verbs. *The International Journal of Language Learning and Applied Linguistics World*, 3(3), 194-207.

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.388.6984&rep=rep1&type=pdf

- Talebinezhad, M. R., & Farhadian, N. (2014). A comparative study of two cognitive models in teaching idiomatic phrasal verbs: Tyler and Evan's vs. Lakoff and Johnson's approach. *Theory and Practice in Language Studies, 4*(8), 1621-1627. doi:http://dx.doi.org/10.4304/tpls.4.8.1621-1627
- Thom, Daniel, "A Cognitive Linguistic Approach to Phrasal Verbs: A Teacher's Guide" (2017). *Honors Senior Theses/Projects*. 139. https://digitalcommons.wou.edu/honors_theses/139
- Thyab, R. (2019). Phrasal verbs in English as a second/foreign language. *Arab World Journal* 10(3), 429-437. DOI: 10.24093/awej/vol10no3.30
- Tyler, A., & Evans, V. (2003). The semantics of English prepositions: Spatial scenes, embodied meaning, and cognition. Cambridge University Press.

- Ushigusa, S. (2008). *The relationships between oral fluency, multiword units, and proficiency scores* (Doctoral dissertation, Perdue University)
- Verspoor, M., & Lowie, W. (2003). Making sense of polysemous words. *Language learning*, 53(3), 547-586. https://doi.org/10.1111/1467-9922.00234
- White, B. J. (2012). A conceptual approach to the instruction of phrasal verbs. *The Modern Language Journal*, 96(3), 419-438.
- William and Flora Hewlett Foundation (2020). *Open education*. William and Flora Hewlett Foundation. *https://hewlett.org/strategy/open-education/*
- Wong, M. H. I., Zhao, H., & MacWhinney, B. (2018). A cognitive linguistics application for second language pedagogy: The English preposition tutor. Language *Learning*, 68(2), 438-468. https://psyling.talkbank.org/years/2018/prepositions.pdf
- Wood, D. (2009). Effects of focused instruction of formulaic sequences on fluent expression in second language narratives: A case study. *The Canadian Journal of Applied Linguistics*, 12(1), 39-57. Retrieved from http://darwin.greensboro.edu:2048/login?url=https://libproxy.greensboro.edu:2077/docview/216969938?accountid=11207
- Yang, A. & Hsieh S. (2010). "Conceptual metaphor awareness on English phrasal verbs teaching and learning for adolescents in Taiwan."
 - 2010. http://ir.lib.ncku.edu.tw/handle/987654321/108255
- Yasuda, S. (2010). Learning phrasal verbs through conceptual metaphors: A case of Japanese EFL learners. *Tesol Quarterly*, 44(2), 250-273. https://doi.org/10.5054/tq.2010.219945